WHAT IS CLAIMED IS:

1. A heat generating apparatus comprising:

a heat generating member;

an exciting coil provided opposite to the heat generating member and serving to cause the heat generating member to generate heat by electromagnetic induction;

a thermostat provided in the vicinity of the heat generating member and serving to stop supply of a power to the exciting coil when a temperature abnormality of the heat generating member is detected;

a power circuit having a rectifying circuit and a smoothing circuit and serving to control the supply of the power to the exciting coil; and

a lead wire connecting the exciting coil, the thermostat and the power circuit,

wherein the thermostat is electrically connected between the rectifying circuit and the smoothing circuit.

2. The heat generating apparatus according to claim 1, wherein the lead wire shares one of two wires connecting the exciting coil to the inverter power circuit and two wires connecting the thermostat to the inverter power circuit.

3. The heat generating apparatus according to claim 1, wherein the lead wire includes a connector containing at

least four pins having two lead connecting the exciting coil to the inverter power circuit and one wire connecting the thermostat to the inverter power circuit, and changes a connecting position of the connector having one wire connecting the thermostat to the inverter power circuit depending on a supply voltage and prevents an erroneous connection of the exciting coil to the inverter circuit based on the supply voltage.

4. The heat generating apparatus according to claim 1, wherein the lead wire includes a connector containing two pins having two wires connecting the exciting coil to the inverter power circuit and a connector containing at least two pins having one wire connecting the thermostat to the inverter power circuit, and changes a connecting position of the connector having one wire connecting the thermostat to the inverter power circuit depending on a supply voltage and prevents an erroneous connection of the exciting coil to the inverter circuit based on the supply voltage.

5. A heat generating apparatus comprising:

a heat generating member;

an exciting coil provided opposite to the heat generating member and serving to cause the heat generating member to generate heat by electromagnetic induction;

a first power source for supplying a power to the exciting coil;

a switching unit for switching ON/OFF of the supply of the power from the first power source to the exciting coil;

a second power source for driving the switching unit; and

a thermostat for stopping the supply of the power from the first power source to the exciting coil when the heat generating member exceeds a predetermined temperature.

6. The heat generating apparatus as claimed in claim 5, further comprising:

a switching unit voltage detecting circuit which detects that a voltage to be applied to the switching unit exceeds a safe operating voltage range; and

a control circuit which controls a power to be supplied to the coil in response to a detection signal of the switching unit voltage detecting circuit.

7. The heat generating apparatus according to claim 6, wherein when the switching unit voltage detecting circuit detects that the safe operating voltage range of the switching unit is exceeded, the control circuit limits the supply of the power to the exciting coil to carry out a control in such a manner that the voltage to be applied to the switching unit maintains a safe operating voltage range limitation.

8. The heat generating apparatus according to claim 6, wherein when the switching unit voltage detecting circuit detects that the safe operating voltage range of the switching unit is exceeded, the control circuit detects the supply of the power to the exciting coil and makes the voltage to be applied to the switching unit attenuate on an optional level within a safe operating voltage range limitation.

9. The heat generating apparatus according to claim 6, wherein when the switching unit voltage detecting circuit detects that the safe operating voltage range of the switching unit is exceeded, the control circuit stops the supply of the power to the exciting coil.

10. An electromagnetic induction heating fixing apparatus for an image forming apparatus, comprising:

a heat generating member;

an exciting coil provided opposite to the heat generating member and serving to cause the heat generating member to generate heat by electromagnetic induction;

a thermostat provided in the vicinity of the heat generating member and serving to stop supply of a power to the exciting coil when a temperature abnormality of the heat generating member is detected;

a power circuit having a rectifying circuit and a smoothing circuit and serving to control the supply of the power to the exciting coil; and

a lead wire connecting the exciting coil, the thermostat and the power circuit,

wherein the thermostat is electrically connected between the rectifying circuit and the smoothing circuit.

11. An image forming apparatus comprising:

photosensitive member;

charger which uniformly charges a surface of the photosensitive member to have a predetermined electric potential;

exposing unit which irradiates scanning line of a light beam corresponding to image data on the charged photosensitive member, thereby forming electrostatic latent images;

developer which develops the electrostatic latent images formed on the photosensitive member;

cleaner which removes a toner remaining on the photosensitive member; and

an electromagnetic induction heating fixing apparatus, comprising:

a heat generating member;

an exciting coil provided opposite to the heat generating member and serving to cause the heat generating member to

generate heat by electromagnetic induction;

a thermostat provided in the vicinity of the heat generating member and serving to stop supply of a power to the exciting coil when a temperature abnormality of the heat generating member is detected;

a power circuit having a rectifying circuit and a smoothing circuit and serving to control the supply of the power to the exciting coil; and

a lead wire connecting the exciting coil, the thermostat and the power circuit,

wherein the thermostat is electrically connected between the rectifying circuit and the smoothing circuit.